

REMARKS

I. INTRODUCTION

With the addition of claims 10 and 11, claims 1 to 8, 10 and 11 are now pending in the present application. Claims 1 and 7 have been amended. In view of the following, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. REJECTION OF CLAIMS 1 to 3 and 5 to 8 UNDER 35 U.S.C. § 102(b)

Claims 1 to 3 and 5 to 8 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,782,403 (“Wang”) and U.S. Patent No. 5,662,766 (“Ishikawa et al.”). It is respectfully submitted that Wang and Ishikawa et al. do not anticipate the present claims for at least the following reasons.

Although the rejection may not be agreed with, to simplify matters, claim 1 has been amended to recite that **the vibration exciter generates linear ultrasonic vibrations in a direction approximately parallel to the contact surface of the substrate.** Neither Wang, nor Ishikawa et al. disclose, or even suggest, that linear ultrasonic vibrations are generated in a direction approximately parallel to the contact surface of a substrate. On the contrary, both references provide for linear ultrasonic vibrations to be generated in a direction perpendicular to a surface of a material to be processed. Accordingly, it is respectfully submitted that neither Wang, nor Ishikawa et al. anticipate claim 1, as amended.

As for claims 2, 3 and 5, which ultimately depend from claim 1 and therefore include all of the features recited in claim 1, it is respectfully submitted that Wang and Ishikawa et al. do not anticipate these dependent claims for at least the same reasons more fully set forth above in support of the patentability of claim 1.

As regards claim 2, it is respectfully submitted that Wang and Ishikawa et al. do not anticipate this claim for the following additional reasons. The ultrasonic transducer (30) of Wang and the longitudinal vibration horn (VH) of Ishikawa et al. are not connected to converters laterally and perpendicularly to center axes of these converters, as required by claim 2 of the present application, but rather end-to-end and coaxially. Thus, it is respectfully submitted that claim 2 is allowable for these additional reasons.

As regards claim 6, neither Wang, nor Ishikawa et al. disclose, or even suggest, that an electrical conductor is fed to a bonding tool through a converter, through a feed channel. Thus, it is respectfully submitted that claim 6 is allowable.

Claim 7 relates to a method for attaching an electrical conductor on a contact surface of a substrate, comprising: generating linear ultrasonic vibrations; and converting the linear ultrasonic vibrations into rotary vibrations, and introducing the rotary vibrations into at least one of the contact surface and the conductor in order to produce a permanent bond between the contact surface and the conductor the rotary vibrations incited about an axis of rotation of rotation about a bonding tool. This claim has now been amended to correct syntax errors.

Neither Wang, nor Ishikawa et al. disclose, or even suggest introducing rotary vibrations into at least one of the contact surface and the conductor in order to produce a permanent bond between the contact surface and the conductor. On the contrary, the apparatus of Wang is only capable of removing a semiconductor chip from a substrate. In addition, the apparatus of Ishikawa et al. is only capable of processing thermoplastics. Accordingly, it is respectfully submitted that neither Wang, nor Ishikawa et al. anticipate claim 7, as amended.

As for claim 8, which ultimately depends from claim 7 and therefore includes all of the features recited in claim 7, it is respectfully submitted that Wang and Ishikawa et al. do not anticipate this dependent claim for at least the same reasons more fully set forth above in support of the patentability of claim 7.

Claim 10 is identical to claim 7 as amended, with the exception that claim 10 includes the feature of claim 1 as amended, that the vibration exciter generates linear ultrasonic vibrations in a direction approximately parallel to the contact surface of the substrate. Accordingly, it is respectfully submitted that Wang and Ishikawa et al. do not anticipate claim 10 for at least the same reasons more fully set forth above in support of the patentability of claims 1 and 7.

Claim 11 depends from claim 10 and therefore includes all of the features recited in claim 10. Therefore, it is respectfully submitted that Wang and Ishikawa et al. do not anticipate claim 11 for at least the same reasons more fully set forth above in support of the patentability of claim 10.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

III. REJECTION OF CLAIM 4 UNDER 35 U.S.C. § 103(a)

Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over Wang in view of U.S. Patent No. 5,733,074 ("Stöck et al."), and over Ishikawa et al. in view of Stöck

et al. It is respectfully submitted that the combination of Wang and Stöck et al. and the combination of Ishikawa et al. and Stöck et al. do not render unpatentable the present claim for at least the following reasons.

As stated above, claim 1, which is a base claim of claim 4, has been amended to recite that *the vibration exciter generates linear ultrasonic vibrations in a direction approximately parallel to the contact surface of the substrate.* Neither Wang, nor Ishikawa et al. disclose, or even suggest, that linear ultrasonic vibrations are generated in a direction approximately parallel to the contact surface of a substrate. In addition, Stöck et al. do not cure the critical deficiencies of Wang and Ishikawa et al. with regard to the above-mentioned feature. Therefore, it is respectfully submitted that claim 4 is allowable.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that all of the presently pending claims are allowable. It is therefore respectfully requested that the rejections be withdrawn, since they have been obviated. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is respectfully requested.

Respectfully submitted,

KENYON & KENYON LLP

Dated: July 30, 2007

By: 
Gerard A. Messina
(Reg. No. 35,952)
One Broadway
New York, New York 10004
(212) 425-7200